Section N: Relation to Local Water Planning

The intent of the Relation to Local Water Planning standard in the Proposition 84/1E Integrated Regional Water Management (IRWM) Program Guidelines is to ensure that the IRWM Plan is congruent with local plans and that the IRWM Plan includes current, relevant elements of local water planning and water management issues common to multiple local entities in the region. IRWM planning does not replace or supersede local planning; rather, local planning elements are used as the foundation for the regional planning effort. This section describes how the Greater Monterey County Regional Water Management Group (RWMG) has coordinated its water management planning activities to address or incorporate all or part of the following actions of its members:

- Local water supply management planning including:
  - Groundwater management
  - Water supply assessments
  - Urban water management
  - Agricultural water management
- Other water resource management planning including:
  - Flood management
  - Watershed management
  - Stormwater management
  - Low impact development (LID)
  - Salt and salinity management
- Other planning efforts including:
  - City and County general planning
  - Emergency response and disaster plans
  - Monterey Bay National Marine Sanctuary Management Plan

N.1 HOW THE IRWM PLAN IS CONSISTENT WITH LOCAL WATER RESOURCE MANAGEMENT PLANS

The goals and objectives for this IRWM Plan have been developed in response to the perceived water resource issues in the Greater Monterey County region. The water resource goals for this Plan include the following:

- *Water Supply:* Improve water supply reliability and protect groundwater and surface water supplies.
- *Water Quality:* Protect and improve surface, groundwater, estuarine, and coastal water quality, and ensure the provision of high-quality, potable, affordable drinking water for all communities in the region.
- *Flood Protection and Floodplain Management:* Develop, fund, and implement integrated watershed approaches to flood management through collaborative and community supported processes.
- *Environment:* Protect, enhance, and restore the region's ecological resources while respecting the rights of private property owners.

In order to achieve those goals, the RWMG must first have a clear understanding of the region's water

system, including current conditions and future water needs. The water system includes not only water supply sources (groundwater, surface water, recycled water, desalinated water, etc.) but also ecological systems (watersheds, floodplains, wetlands, and coastal waters), as these systems are integrally connected. The information used to describe the region's water system for the purposes of this IRWM Plan has been derived almost entirely from existing local and regional water resource management plans. This IRWM Plan has incorporated the information and data from those existing plans and is therefore consistent with those plans. The following sections describe the local plans that have been used to inform the regional IRWM planning effort.

N.1.1 Local Water Supply Management Planning

Monterey County Groundwater Management Plan: The Monterey County Groundwater Management Plan (GWMP) was prepared by the Monterey County Water Resources Agency (MCWRA) in 2006 in accordance with California Water Code (CWC) Part 2.7, §10753, Groundwater Management Act. The document provides the framework for the management of groundwater resources in the Salinas Valley Groundwater Basin (exclusive of the Seaside and Paso Robles subareas) and acts as a guidance document for future groundwater projects. While the 2006 GWMP focuses on the Salinas Valley Groundwater Basin, MCWRA is responsible for the management of the water resources for all of Monterey County, and future GWMP editions will incorporate the additional groundwater basins in the County. The overall basin management objectives of the GWMP are:

- Development of integrated water supplies to meet existing and project water requirements
- Determination of sustainable yield and avoidance of overdraft
- Preservation of groundwater quality for beneficial use

To accomplish these objectives, the GWMP incorporates a number of components, which are divided into a set of 14 elements. The elements formally recognize the effectiveness of a number of ongoing water resource management activities and further recognize the need for additional activity, such as expanded conjunctive use of supplemental surface water and recycled water, with groundwater. They also reflect the wider focus on groundwater management, such as continuing cooperation with the municipal water purveyors and other groundwater users in the basin to address the impacts of regional resource opportunities and/or challenges. The plan elements are as follows:

- Plan Element 1: Monitoring of Groundwater Levels, Quality, Production, and Subsidence
- Plan Element 2: Monitoring of Surface Water Storage, Flow, and Quality
- Plan Element 3: Determination of Basin Yield and Avoidance of Overdraft
- Plan Element 4: Development of Regular and Dry Year Water Supply
- Plan Element 5: Continuation of Conjunctive Use Operations
- Plan Element 6: Short-Term and Long-Term Water Quality Management
- Plan Element 7: Continued Integration of Recycled Water
- Plan Element 8: Identification and Mitigation of Groundwater Contamination
- Plan Element 9: Identification and Management of Recharge Areas and Wellhead Protection Areas
- Plan Element 10: Identification of Well Construction, Abandonment, and Destruction Policies
- Plan Element 11: Continuation of Local, State and Federal Agency Relationships
- Plan Element 12: Continuation of Public Education and Water Conservation Programs
- Plan Element 13: Groundwater Management Reports
- Plan Element 14: Provisions to Update the Groundwater Management Plan

The goals and objectives of this IRWM Plan are fully consistent with the basin management objectives of

the GWMP. Numerous projects included in this Plan have been developed specifically to carry out the GWMP objectives.

Ground Water Extraction Summary Reports: MCWRA began collecting groundwater extraction data from well operators for agricultural and urban water uses in 1992. The groundwater extraction data, provided by over 300 well operators, is compiled in the Ground Water Extraction Management System portion of MCWRA Information Management System, a relational database maintained by the MCWRA, and published in the annual Ground Water Extraction Summary Reports (GWESR). Since 1991, MCWRA has also required the annual submittal of Agricultural Water Conservation Plans, which outline the best management practices (BMPs) that are adopted each year by growers in the Salinas Valley. In 1996, an ordinance was passed that required the filing of Urban Water Conservation Plans. These plans provide an overview of per capita water use and BMPs being implemented by urban water users as conservation measures. The GWESR summarizes the data submitted to the MCWRA for both Agricultural and Urban Water Conservation Plans, as well as agricultural Water and Land Use Forms. Data from the GWESR has been used in this IRWM Plan to establish historic water use trends, to document current water use, and as a basis for estimating future water demand in the Salinas Valley Groundwater Basin.

Urban Water Management Plans: All urban water suppliers as defined in CWC §10617, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) annually are required to prepare an Urban Water Management Plan (UWMP). The UWMP serves as a long-range planning document for water supply, source data for development of a regional water plan, and a source document for cities and counties as they prepare their General Plans. UWMPs include a description of the service area (including population served), historical and current water demand and water demand projections, an overview of water system supplies (including purchased water, surface water, groundwater, recycled water, desalinated water, and water transfers), water supply reliability and water shortage contingency plans, and conservation master plans, among other topics.

UWMPs for the following water districts have been used in the development of this IRWM Plan:

- City of Greenfield (2008)
- King City (2010)
- Marina Coast Water District (2010)
- California Water Service Company-Salinas District (2010)
- City of Soledad (2010)

Information from these UWMPs has been used to describe water systems and to establish future urban water demand in the Salinas Valley Groundwater Basin. Note that the City of Gonzales and the Castroville Community Services District (CCSD) are both under 3,000 connections and therefore are not required to produce an UWMP; however CCSD has developed a modified UWMP to address California Department of Environmental Health (CDEH) requirements for individual hydrologic studies in unincorporated Monterey County, though this document is not available in electronic format.

LAFCO Municipal Services Reviews: The Local Agency Formation Commission of Monterey County (LAFCO) produces Municipal Service and Sphere and Influence Reviews (MSR) for urban areas and other planning districts within the County. State law requires that the Commission conduct periodic reviews and updates of the Sphere of Influence of each city and district in Monterey County (Government Code §56425(e)). The law also requires the Commission to update information about municipal services before adopting Sphere updates (Government Code §56430). The MSRs contain information pertinent to

understanding the water management and water management needs in the Greater Monterey County IRWM planning region, including: growth and population projections; present and planned land uses in the area, including agricultural and open space lands; description of present and planned public facilities, including water supply, wastewater, stormwater, and flood management infrastructure; and adequacy of public services, including infrastructure deficiencies and needs.

The following MSRs have been used in the development of this IRWM Plan:

- City of Gonzales (2010)
- City of Greenfield (2010)
- King City LAFCO (2010)
- City of Marina (2011)
- City of Salinas (2010)
- City of Soledad (2010)
- North County (2006)
- South/Central County (2006)

The specific information derived from these MSRs includes population and population growth data, land use, and water resource infrastructure and needs for the cities and planning districts within the Greater Monterey County IRWM planning region.

N.1.2 Other Water Resource Management Planning

N.1.2.a Flood Protection and Floodplain Management

Monterey County Floodplain Management Plan: The MCWRA developed the *Monterey County Floodplain Management Plan* in 2002 with the goal of creating a plan to minimize the loss of life and property in areas where repetitive losses have occurred, and to ensure that the natural and beneficial functions of the County's floodplains are protected. Updated in 2008, the Plan describes the County's flood control system (infrastructure), identifies flood zones defined by the Federal Emergency Management Agency (FEMA), including maps depicting Repetitive Loss Properties (RLPs) and 100-year floodplains, provides a general hazard assessment, assesses the flood hazards of specific waterways in the County in terms of repetitive losses, and provides an implementation plan for flood mitigation and for mitigation of RLPs.

Information from the Floodplain Management Plan has been used in this IRWM Plan to provide the RWMG and stakeholders with an understanding of flooding, flood protection, and floodplain management in the Greater Monterey County IRWM region. The Flood Protection and Floodplain Management objectives in this IRWM Plan incorporate and are fully consistent with the objectives of the *Monterey County Floodplain Management Plan*. In addition, several projects in the IRWM Plan will help carry out these objectives through flood risk reduction and restoring ecological functioning to floodplains.

N.1.2.b Watershed Management

Information from current and recent watershed assessments and management plans has been used in this IRWM Plan primarily to provide background for the RWMG and stakeholders about local watershed management planning efforts. This information is presented in Section B.6.2.c, Water Quality Goals and Objectives for Watersheds in the Region. The goals and objectives of this IRWM Plan are fully congruent with the various watershed management planning efforts in the Greater Monterey County region. In fact,

many of the objectives in this Plan were derived from these and previous watershed assessment and planning efforts.

The following watershed management plans have been considered and incorporated into this IRWM Plan (for details about the watershed management plans, see Section B.6.2.c):

- ***San Antonio and Nacimiento Rivers Watershed Management Plan (2008):*** This watershed management plan was developed by the Nacitone Watersheds Steering Committee and Central Coast Salmon Enhancement, Inc. for the MCWRA and the State Water Resources Control Board (SWRCB) in October 2008.
- ***Garrapata Creek Watershed Assessment and Restoration Plan (2006):*** This plan was developed by the Garrapata Creek Watershed Council for the Garrapata Creek Watershed Community and the California Department of Fish and Game (CDFG) in July 2006.
- ***Northern Salinas Valley Watershed Restoration Plan (1997):*** This plan was the Final Report of a study entitled, "Nonpoint Pollution in Coastal Harbors and Sloughs of the Monterey Bay Region" prepared for the Association of Monterey Bay Area Governments (AMBAG) by Moss Landing Marine Laboratories and the Watershed Institute of California State University Monterey Bay (CSUMB) in January 1997, and funded under Section 205(j) of the federal Clean Water Act. The plan focuses on the northern Salinas Valley, encompassing all of the water courses that flow from the Gabilan Mountains east of Salinas into Moss Landing Harbor.
- ***Reclamation Ditch Watershed Assessment and Management Strategy (2005):*** This study, completed for MCWRA by the Central Coast Watershed Studies (CCoWS) team of the Watershed Institute at CSUMB, focuses on the same geographic area as the Northern Salinas Valley Watershed Restoration Plan, a 157 square-mile watershed with its headwaters in the Gabilan Range and its terminus at a set of tide gates at the entrance to Moss Landing Harbor (see Casagrande and Watson 2005).
- ***Moro Cojo Slough Management and Enhancement Plan (1996):*** The Moro Cojo Slough Management Plan was developed for the Monterey County Planning and Building Inspection Department and the State Coastal Conservancy by The Habitat Restoration Group in October 1996. The plan describes the environmental resources of the Moro Cojo Slough watershed and recommends actions to enhance, restore, and manage the significant resources in the slough system.
- ***Elkhorn Slough Watershed Conservation Plan (1999):*** This plan was produced for the Elkhorn Slough Foundation and The Nature Conservancy in 1999. The Conservation Plan was developed to identify critical resources within the Elkhorn Slough watershed, to identify and address threats, and to maintain the long-term viability of Elkhorn Slough and its related upland communities as a significant coastal system. In 2002, a second report was produced based on the Elkhorn Slough Watershed Conservation Plan. *Elkhorn Slough at the Crossroads: Natural Resources and Conservation Strategies for the Elkhorn Slough Watershed* identifies key natural resources of the slough and suggests strategies for conserving them.

Proposals exist for additional watershed planning in the region, including the Gabilan Creek sub-watershed. A watershed assessment and management plan for the Big Sur River watershed has recently been funded by the CDFG, and is expected to be completed in 2014. Other plans related to steelhead and watershed management in the Big Sur River watershed that have been considered in the development of this IRWM Plan include the following:

- ***Federal Recovery Outline for the Distinct Population Segment of South-Central California Coast Steelhead (National Marine Fisheries Service, Southwest Regional Office, 2007):*** The federal Endangered Species Act of 1973 requires that the National Oceanic and Atmospheric

Administration, National Marine Fisheries Service (NMFS) develop and implement recovery plans for the conservation and survival of NMFS-listed species. In the interim between listing and recovery plan approval, NMFS Interim Recovery Planning Guidance requires the development of a Recovery Outline for the listed species. The Recovery Outline presents a preliminary strategy for recovery of the species, with recommended high priority actions to stabilize and recover the species. The Recovery Outline for South-Central Steelhead was reviewed as part of the development of this IRWM Plan. A draft Recovery Plan has been completed for the South-Central California Steelhead and will be undergoing review by NMFS.

Recovery planning for South-Central California Coast Steelhead is fully supported in this IRWM Plan. Several objectives in the IRWM Plan promote the protection and enhancement of steelhead and steelhead habitat, including:

- Protect and enhance state and federally listed species and their habitats.
- Implement fish-friendly stream and river corridor restoration projects.
- Reduce adverse impacts of sedimentation into streams, particularly from roads and non-point sources.
- Develop and implement projects to protect, restore, and enhance the natural ecological and hydrological functions of rivers, creeks, streams, and their floodplains.

The RWMG will continue to stay abreast of federal recovery plans for steelhead and to promote fish-friendly projects through this IRWM Plan.

- ***Big Sur River Protected Waterway Management Plan (1983):*** The *Big Sur River Protected Waterway Management Plan* was developed in response to the California Protected Waterways Act and also as a management program intended to assist in implementing the Big Sur Coast Local Coastal Program Land Use Plan. The plan was adopted by the Monterey County Planning Commission in 1983; certification was acknowledged by the California Coastal Commission in 1986. The California Protected Waterways Plan, prepared in 1971 pursuant to the Protected Waterways Act of 1968, recognized the Big Sur River as an important steelhead and trout stream. In 1973, the State Legislature, with the support of the Monterey County Board of Supervisors, designated the Big Sur River a protected waterway. The resolution that incorporated the Big Sur River into the Protected Waterways Program requested the Resources Agency and affected local agencies to prepare a detailed waterway management plan for the Big Sur River. This protected waterway plan addresses pertinent issues and concerns in the Lower Big Sur River Basin. The plan serves as a guide for the RWMG in promoting IRWM Plan projects along the Big Sur River.

- ***Little Sur River Protected Waterway Management Plan (1983)****:* The Little Sur River Protected Waterway Management Plan was also developed in response to the California Protected Waterways Act and also as a management program intended to assist in implementing the Big Sur Coast Local Coastal Program Land Use Plan. The plan was adopted by the Monterey County Planning Commission in 1983; certification was acknowledged by the California Coastal Commission in 1986. The resolution that incorporated the Little Sur River into the Protected Waterways Program requested the Resources Agency and affected local agencies to prepare a detailed waterway management plan for the Little Sur River. This protected waterway plan addresses pertinent issues and concerns in the Little Sur River Basin. The plan serves as a guide for the RWMG in promoting IRWM Plan projects along the Little Sur River.

- ***Big Sur Enhancement Plan for Steelhead Habitat (2003):*** The *Big Sur Enhancement Plan for Steelhead Habitat* was developed for the California Department of Parks and Recreation (DPR) in

2003. The plan focuses its geographic scope to the two State Park properties within the Big Sur River watershed: Andrew Molera State Park and Pfeiffer-Big Sur State Park. The primary purpose of the Enhancement Plan is to characterize the status of the existing steelhead within the project area and provide recommendations for habitat enhancement and resource management measures that benefit the species. One of the projects in this IRWM Plan, "Big Sur River Steelhead Enhancement Project" proposed by California State Parks, will implement several of the recommendations included in the Enhancement Plan.

N.1.2.c Stormwater Management

Stormwater management programs and plans are discussed in this IRWM Plan in Section B.6.3.a, Regulatory Water Quality Programs, under "Federal and State Stormwater/Urban Runoff Programs." The section describes each of the following stormwater programs and plans:

- City of Salinas Stormwater Management Plan (2007)
- King City National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Management Plan (2009)
- City of Soledad Stormwater Management Plan (2004)
- Monterey Regional Stormwater Management Program (2006)

The City of Salinas is the only Phase I Municipal Separate Storm Sewer System (MS4) in the Central Coast Region, and is covered by an individual NPDES Phase I permit. Cities within the Greater Monterey County IRWM planning region enrolled under the Phase II General Permit for Stormwater Discharges include King City, Soledad, and Marina. While King City and the City of Soledad have individual stormwater programs, the City of Marina joined with Monterey County and several Monterey Peninsula cities to apply as co-permittees under a single General Plan, called the Monterey Regional Storm Water Management Program (MRSWMP). Information from these stormwater programs and plans has been incorporated into the IRWM Plan in order to inform the RWMG and stakeholders about local stormwater management as part of the region's water system. The goals and objectives of the IRWM Plan support the stormwater management efforts described in these plans (as indicated in the IRWM Plan objective: "capture and manage stormwater runoff").

N.1.2.d Low Impact Development

One of the Water Quality objectives of this IRWM Plan is to "incorporate or promote principles of low impact development where feasible, appropriate, and cost effective." To help address that objective, a project by the UC Davis Marine Pollution Studies Laboratory was put forward and awarded funds in Round 1 of the Proposition 84 IRWM Implementation Grants to evaluate the efficacy of LID treatment components in reducing the concentrations of contaminants that contribute to stormwater toxicity. Objectives of the study include evaluating efficacy of bioswales or other treatment systems in reducing stormwater runoff toxicity to aquatic organisms; determining stormwater load reduction and stormwater pollutant load reduction through infiltration in LID design components; and providing data to stormwater agencies, water quality managers, LID engineers, and others to be incorporated into future planning and management decisions to protect the Salinas River Watershed.

RWMG entities are also working with the Central Coast Regional Water Quality Control Board (RWQCB) on the Central Coast Joint Effort for LID and Hydromodification Control (described in Section B.6.3.b, Voluntary Water Quality Programs). The Municipal NPDES Stormwater Permit requires municipalities to develop performance measures and, in some cases, numeric criteria to manage stormwater. Development of these measures and criteria requires substantial knowledge of urban

hydrologic processes; appropriate use of LID techniques; and an understanding of technical, policy and regulatory issues related to implementing municipal stormwater control requirements. The Central Coast RWQCB is providing municipalities the option of participating in a Joint Effort, led by a consultant team, to develop hydromodification control criteria to meet the RWQCB's stormwater regulations for new and redevelopment. The RWMG is interested in promoting LID practices in the Greater Monterey County IRWM region, and will continue to work with the RWQCB on the Central Coast Joint Effort and with local agencies to encourage the implementation of LID practices, where appropriate.

N.1.2.e Salt and Salinity Management

The SWRCB adopted a Recycled Water Policy in February 2009, which requires local stakeholders, such as local water and wastewater entities, and members of the public to develop salt and nutrient management plans for groundwater basins. The Policy mandates completion of the salt and nutrient management plans by May 14, 2014, although it allows the Central Coast RWQCB to permit a two-year extension (until May 14, 2016) if the stakeholders demonstrate substantial progress toward completion of the plan.

No entity has as of yet initiated the salt and nutrient management planning process within the Greater Monterey County IRWM planning region. However, the Central Coast RWQCB has included the following in the City of Salinas Stormwater Permit (RWQCB 2012d, pp. 86-87):

> b) Salt and Nutrient Management
>
> i) Within 2 years of adoption of this Order, the Permittee shall coordinate with local water and wastewater entities, together with local salt/nutrient contributing stakeholders, to fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for groundwater basins underlying the Permit coverage area, per State Water Board Recycled Water Policy (State Water Board Resolution No. 2009-0011).
>
> ii) Within 4 years of adoption of this Order, the Permittee shall evaluate opportunities to include a significant stormwater use and recharge component within the salt/nutrient management plan(s). At a minimum, the Permittee shall coordinate with other stakeholders to include stormwater recharge/use goals and objectives in salt and nutrient management plan(s).

Whenever the salt and nutrient management planning effort for the Salinas Valley Groundwater Basin is initiated, either by the City of Salinas or some other entity, the RWMG will be sure to coordinate that planning effort with the IRWM Plan.

N.1.3 Other Planning Efforts

N.1.3.a City and County General Planning

Every county and city in California is required by State law to have a General Plan, and the plan is required to be up to date. The General Plan identifies the county or city's goals, policies, and implementation actions regarding future development within that region. State law provides that a General Plan must address, at minimum, seven elements: Land Use, Circulation, Housing, Natural Resource Conservation, Open Space, Noise, and Safety.

The Monterey County 2010 General Plan and General Plans of the cities in the region have been carefully reviewed during the development of this IRWM Plan to identify common goals, to highlight areas of

inconsistency or potential barriers to implementing objectives of the IRWM Plan, and to seek opportunities for increasing coordination between water use and land use planning. The following General Plans have been reviewed:

- City of Gonzales Draft General Plan 2010 (Public Review Draft)
- City of Greenfield General Plan 2005-2025
- City of Marina General Plan 2000, Updated 2006
- City of Salinas General Plan 2002
- City of Soledad General Plan 2005
- King City General Plan 1998
- Monterey County General Plan 2010, including Specific Plans for:
  - Big Sur Coast Land Use Plan (Local Coastal Program) 2008
  - Ford Ord Master Plan
  - Central Salinas Valley Area Plan
  - Greater Salinas Area Plan
  - North County Area Plan
  - South County Area Plan
  - Toro Area Plan

In addition, the *Implementation Plan for the Boronda and Castroville/Pajaro Redevelopment Areas 2010*, produced by Monterey County Redevelopment Agency, has also reviewed in the development of this IRWM Plan.

The policies of the General Plans are generally consistent with the goals and objectives of the IRWM Plan. As an example—and as a good representation of other General Plans in the region—the following list provides goals and policies from the Monterey County 2010 General Plan that support the IRWM Plan objectives (this list is not exhaustive):

Land Use Element

- *Goal LU-8:* Encourage the provision of open space lands as part of all types of development including residential, commercial, industrial and public.

Conservation and Open Space Element

- *Goal OS-1:* Retain the character and natural beauty of Monterey County by preserving, conserving, and maintaining unique physical features, natural resources, and agricultural operations.
- *Goal OS-3:* Prevent soil erosion to conserve soils and enhance water quality.
  - *Policy OS-3.1:* Best Management Practices (BMPs) to prevent and repair erosion damage shall be established and enforced.
  - *Policy OS-3.2:* Existing special district, state, and federal soil conservation and restoration programs shall be supported. Voluntary restoration projects initiated by landholders, or stakeholder groups including all affected landowners, shall be encouraged.
  - *Policy OS-3.3:* Criteria for studies to evaluate and address, through appropriate designs and BMPs, geologic and hydrologic constraints and hazards conditions, such as slope and soil instability, moderate and high erosion hazards, and drainage, water quality, and stream stability problems created by increased stormwater runoff, shall be established for new development and changes in land use designations.
  - *Policy OS-3.7:* Voluntary preparation and implementation of a coordinated resource management plan shall be encouraged in watersheds of State designated impaired waterways.

- *Policy OS-3.8:* The County shall cooperate with appropriate regional, state and federal agencies to provide public education/outreach and technical assistance programs on erosion and sediment control, efficient water use, water conservation and re-use, and groundwater management. This cooperative effort shall be centered through the Monterey County Water Resources Agency.
- *Policy OS-3.9:* The County will develop a Program that will address the potential cumulative hydrologic impacts of the conversion of hillside rangeland areas to cultivated croplands.

- *Goal OS-4:* Protect and conserve the quality of coastal, marine, and river environments, as applied in areas not in the Coastal Zone.
  - *Policy OS-4.1:* Federal and State listed native marine and fresh water species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant shall be protected. Species designated in Area Plans shall also be protected.
  - *Policy OS-4.2:* Direct and indirect discharges of harmful substances into marine waters, rivers or streams shall not exceed state or federal standards.
  - *Policy OS-4.3:* Estuaries, salt and fresh water marshes, tide pools, wetlands, sloughs, river and stream mouth areas, plus all waterways that drain and have impact on State designated Areas of Special Biological Significance (ASBS) shall be protected, maintained, and preserved in accordance with state and federal water quality regulations.
- *Goal OS-5:* Conserve listed species, critical habitats, habitat and species protected in Area Plans; avoid, minimize and mitigate significant impacts to biological resources.
  - *Policy OS-5.3:* Development shall be carefully planned to provide for the conservation and maintenance of critical habitat.
  - *Policy OS-5.4:* Development shall avoid, minimize, and mitigate impacts to listed species and critical habitat to the extent feasible.
  - *Policy OS-5.6:* Native and native compatible species, especially drought resistant species, shall be utilized in fulfilling landscaping requirements.
  - *Policy OS-5.14:* Policies and procedures that encourage exclusion and control or eradication of invasive exotic plants and pests shall be established. Sale of such items within Monterey County shall be discouraged.
  - *Policy OS-5.15:* A fee waiver program for environmental restoration projects shall be established.
  - *Policy OS-5.21:* At five year intervals, the County shall examine the degree to which thresholds for increased population, residential construction, and commercial growth predicted in the General Plan Environmental Impact Report (EIR) for the timeframe 2006-2030 have been attained. If the examination indicates that actual growth is within 10 percent of the growth projected in the General Plan EIR (10,015 new housing units; 500 acres new commercial development; 3,111 acres new industrial development and 10,253 acres of land converted to agriculture), the County shall assess the vulnerability of currently non-listed species becoming rare, threatened, or endangered due to projected development. The County shall complete the preparation of a conservation strategy for those areas containing substantial suitable habitat for plant and wildlife species with the potential to become listed species due to development. …
  - *Policy OS-5.22:* In order to preserve riparian habitat, conserve the value of streams and rivers as wildlife corridors and reduce sediment and other water quality impacts of new development, the county shall develop and adopt a Stream Setback Ordinance. … The ordinance shall identify specific setbacks relative to the following rivers and creeks so they can be implemented in the Area Plans: Salinas, Carmel River, Arroyo Seco, Pajaro River,

Nacimiento, San Antonio, Gabilan Creek, and Toro Creek.

- *Goal OS-9:* Promote efficient energy use.
- *Goal OS-10:* Provide for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities.
  - *Policy OS-10.7:* Use of the best available technology for reducing air pollution emissions shall be encouraged.
  - *Policy OS-10.11:* Within 24 months of the adoption of the General Plan, Monterey County shall develop and adopt a Greenhouse Gas (GHG) Reduction Plan with a target to reduce emissions by 2020 to the 1990 level to a level that is 15 percent less than 2005 emission levels. At a minimum, the Plan shall:
    a. Establish an inventory of current (2006) GHG emissions in the County of Monterey including but not limited to residential, commercial, industrial, and agricultural emissions; and
    b. Include an inventory of emissions as of 1990 Forecast GHG emissions for 2020 for County operations;
    c. Forecast GHG emissions for areas within the jurisdictional control of the County for "business as usual" conditions;
    d. Identify methods to reduce GHG emissions;
    e. Quantify the reductions in GHG emissions from the identified methods;
    f. Establish requirements for monitoring and reporting of GHG emissions;
    g. Establish a schedule of actions for implementation;
    h. Identify funding sources for implementation; and
    i. Identify a reduction goal for the 2030 Planning Horizon.

    During preparation of the Greenhouse Gas Reduction Plan, the County shall also evaluate potential options for changes in County policies regarding land use and circulation, as necessary, to further achieve the 2020 and 2030 reduction goals and measures to promote urban forestry and public awareness concerning climate change.

Public Services Element

- *Goal PS-2:* Assure an adequate and safe water supply to meet the County's current and long-term needs.
  - *Policy PS-2.1:* Coordination among, and consolidation with, those public water service providers drawing from a common water table to prevent overdrawing the water table is encouraged.
  - *Policy PS-2.6:* A Hydrologic Resources Constraints and Hazards Database shall be developed and maintained in the County Geographic Information System (GIS). The GIS shall be used to identify areas containing hazards and constraints (see Policy S- 1.2) that could potentially impact the type or level of development allowed in these areas (Policy OS-3.5). Maps maintained as part of the GIS will include:
    a. Impaired water bodies on the State Water Resources Control Board 303d (Clean Water Act) list.
    b. Important Groundwater Recharge Areas
    c. 100-year Flood Hazards
    d. Hard rock areas with constrained groundwater

e. Areas of septic tank leachfield unsuitability

f. Contaminated groundwater plumes and impacted soil and groundwater sites.

- *Policy PS-2.7:* As part of an overall conservation strategy and to improve water quality, Area Plans may include incentive programs that encourage owners to voluntarily take cultivated lands on slopes with highly erosive soils out of production.
- *Policy PS-2.8:* The County shall require that all projects be designed to maintain or increase the site's pre-development absorption of rainfall (minimize runoff), and to recharge groundwater where appropriate. Implementation would include standards that could regulate impervious surfaces, vary by project type, land use, soils and area characteristics, and provide for water impoundments (retention/detention structures), protecting and planting vegetation, use of permeable paving materials, bioswales, water gardens, and cisterns, and other measures to increase runoff retention, protect water quality, and enhance groundwater recharge.
- *Policy PS-2.9:* Protect and manage groundwater as a valuable and limited shared resource. The County shall use discretionary permits to manage construction of impervious surfaces in important groundwater recharge areas. Potential recharge area protection measures at sites in important groundwater recharge areas include, but are not limited to, the following:

  a. Restrict coverage by impervious materials.

  b. Limit building or parking footprints.

  c. Require construction of detention/retention facilities on large-scale development project sites overlying important groundwater recharge areas as identified by Monterey County Water Resources Agency.

  d. Recognize that detention/retention facilities on small sites may not be practical, or feasible, and may be difficult to maintain and manage.

- *Goal PS-3:* Ensure that new development is assured a long-term sustainable water supply.
  - *Policy PS-3.4:* Specific criteria shall be developed for use in the evaluation and approval of adequacy of all new wells. Criteria shall assess both water quality and quantity including, but not limited to:

    a. Water quality. …

    g. Effects on in-stream flows necessary to support riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead, for the purpose of minimizing impacts to those resources and species.

  - *Policy PS-3.6:* The Monterey County Health Department shall not allow construction of any new wells in known areas of saltwater intrusion as identified by Monterey County Water Resources Agency or other applicable water management agencies until such time as a program has been approved and funded that will minimize or avoid expansion of salt water intrusion into useable groundwater supplies in that area. This policy shall not apply to deepening or replacement of existing wells.
  - *Policy PS-3.8:* The County shall coordinate and collaborate with all agencies responsible for the management of existing and new water resources.
  - *Policy PS-3.9:* A program to eliminate overdraft of water basins shall be developed as part of the Capital Implementation and Financing Plan (CIFP) for this Plan using a variety of strategies, which may include but are not limited to:

    a. Water banking;

    b. Groundwater and aquifer recharge and recovery;

c. Desalination;

d. Pipelines to new supplies; and/or

e. A variety of conjunctive use techniques.

The CIFP shall be reviewed every five (5) years in order to evaluate the effectiveness of meeting the strategies noted in this policy. Areas identified to be at or near overdraft shall be a high priority for funding.

- *Policy PS-3.10:* Developments that use gray water and cisterns for multi-family residential and commercial landscaping shall be encouraged, subject to a discretionary permit.
- *Policy PS-3.12:* Maximize agricultural water conservation measures to improve water use efficiency and reduce overall water demand. The County shall establish an ordinance identifying conservation measures that reduce agricultural water demand.
- *Policy PS-3.13:* Maximize urban water conservation measures to improve water use efficiency and reduce overall water demand. The County shall establish an ordinance identifying conservation measures that reduce potable water demand.
- *Policy PS-3.14:* Maximize the use of recycled water as a potable water offset to manage water demands and meet regulatory requirements for wastewater discharge, by employing strategies including, but not limited to, the following:

  a. Increase the use of treated water where the quality of recycled water is maintained, meets all applicable regulatory standards, is appropriate for the intended use, and re-use will not significantly impact beneficial uses of other water resources.

  b. Work with the agricultural community to develop new uses for tertiary recycled water and increase the use of tertiary recycled water for irrigation of lands currently being irrigated by groundwater pumping.

  c. Work with urban water providers to emphasize use of tertiary recycled water for irrigation of parks, playfields, schools, golf courses, and other landscape areas to reduce potable water demand.

  d. Work with urban water providers to convert existing potable water customers to tertiary recycled water as infrastructure and water supply become available.

- *Policy PS-3.17:* The County will pursue expansion of the Salinas Valley Water Project (SVWP) by investigating expansion of the capacity for the Salinas River water storage and distribution system. This shall also include, but not be limited to, investigations of expanded conjunctive use, use of recycled water for groundwater recharge and seawater intrusion barrier, and changes in operations of the reservoirs. …
- *Policy PS-3.18:* As required by PS-3.17, County will convene and coordinate a working group made up of the Salinas Valley cities, the MCWRA, and other affected entities. The purpose will be to identify new water supply projects, water management programs, and multiple agency agreements that will provide additional domestic water supplies for the Salinas Valley. These may include, but not be limited to, expanded conjunctive use programs, further improvements to the upriver reservoirs, additional pipelines to provide more efficient distribution, and expanded use of recycled water to reinforce the hydraulic barrier against seawater intrusion. …

- *Goal PS-4:* Ensure adequate treatment and disposal of wastewater.
  - *Policy PS-4.4:* Groundwater recharge through the use of reclaimed wastewater, not including primary treated wastewater, in accordance with federal, state, and local laws, regulations and ordinances, shall be encouraged.
- *Goal PS-11:* Maintain and enhance the County's parks and trails system in order to provide

recreational opportunities, preserve natural scenic resources and significant wildlife habitats, and provide good stewardship of open space resources.

Agriculture Element

- *Goal AG-1:* Promote the long-term protection, conservation, and enhancement of productive and potentially productive agricultural land.
- *Goal AG–5:* Ensure compatibility between the County's agricultural uses and environmental resources.
  - *Policy AG–5.1:* Programs that reduce soil erosion and increase soil productivity shall be supported.
  - *Policy AG–5.2:* Policies and programs to protect and enhance surface water and groundwater resources shall be promoted, but shall not be inconsistent with State and federal regulations.

Greater Salinas Area Plan: Public Services Element

- *Goal GS-5.1:* Portions of Gabilan Creek shall be evaluated for a linear park as defined by the County's Parkland Classification System at such time when the County can support another regional park. Until such time, Gabilan Creek shall be:
  a. Maintained in a natural riparian state;
  b. Kept in a free-flow state devoid of dams;
  c. Allowed its natural flood capacity through required setbacks conforming to the 100 year flood plain; and
  d. Kept free from urban encroachment by residential development through required dedication of land in the floodplain corridor.

Note that the RWMG intends to conduct an in-depth investigation of potential barriers to IRWM Plan implementation in the city and county General Plan policies, ordinances, and other state, regional, and local rules and regulations, for future updates of this IRWM Plan.

N.1.3.b Emergency Response and Disaster Plans

Monterey County Multi-Jurisdictional Hazard Mitigation Plan (2007): The Disaster Mitigation Act of 2000 (DMA 2000) (Public Law 106-390) was passed by Congress to emphasize the need for mitigation planning to reduce vulnerability to natural and human-caused hazards. For multi-jurisdictional plans, DMA stipulates that the plan be adopted by the participating local governing bodies. The Hazard Mitigation Plan for Monterey County was developed for the Monterey County Office of Emergency Services in 2007 and was adopted by County of Monterey and the cities of Carmel-by-the-Sea, Del Rey Oaks, Gonzales, Greenfield, King City, Marina, Monterey, Pacific Grove, Salinas, Sand City, and Soledad. The plan includes a hazard analysis (including coastal erosion, dam failure, earthquake, flood, hazardous materials event, landslide, tsunami, wildland fire, and windstorm), a vulnerability analysis, and a mitigation strategy.

Emergency response and disaster planning naturally involves water resource planners both in the preparation and mitigation phases. Preparation includes, for example:

- Locating and constructing water supply, wastewater, and other infrastructure in such a way to reduce the effects of earthquakes, floods, tsunamis, and other disasters (Goal 1: Prevent disaster-resistant development)
- Helping coastal residents minimize erosion and stabilize slopes (Goal 3: Reduce the possibility of

damage and losses due to coastal erosion)

- Participating in California Division of Safety of Dams (DSOD) mapping updates and reviewing and updating County inundation maps regularly (Goal 4: Reduce the possibility of damage and losses due to dam failure)
- Identifying and implementing minor flood and stormwater management projects to reduce damage to infrastructure and damage due to local flooding/inadequate drainage, including the modification of existing culverts and bridges, upgrading capacity of storm drains, stabilization of streambanks, and creation of debris or flood/stormwater retention basins in small watersheds (Goal 6: Reduce the possibility of damage and losses due to floods)

Mitigation includes, for example, mitigating property damage following flood events, plans for ensuring the delivery of water following disaster events, and plans for managing the response effort.

Although emergency response and disaster planning is not discussed as a separate topic in this IRWM Plan, several RWMG entities do participate in the multi-jurisdictional hazard mitigation planning effort, and the IRWM Plan incorporates many of the objectives of that effort. Note that several IRWM Plan projects directly address the goals of hazard preparation and mitigation through such means as infrastructure improvements, erosion control, coastal restoration, and flood risk reduction projects. Also, the MCWRA outlines a plan for flood mitigation in the *Monterey County Floodplain Management Plan*, which has been incorporated into this Plan in Section C, Flood Management.

N.1.3.c Monterey Bay National Marine Sanctuary Management Plan

The *Monterey Bay National Marine Sanctuary (MBNMS) Final Management Plan* was developed in 2008, and includes 23 Action Plans to guide the Sanctuary in protecting resources over a five-year planning period. Most of the Action Plans are grouped into four main themes: coastal development, ecosystem protection, water quality, and wildlife disturbance. This IRWM Plan discusses and/or incorporates the strategies of several of the Sanctuary's Action Plans, including most notably: Desalination; Big Sur Coastal Ecosystem Plan; Introduced Species; and implementation of the Water Quality Protection Program Action Plans, in particular: *Implementing Solutions to Urban Runoff*; *Regional Monitoring, Data Access, and Interagency Coordination*; and *Agriculture and Rural Lands*. Section B.6.3.b of this IRWM Plan describes two voluntary water quality programs that have been specifically developed out of MBNMS's Water Quality Protection Program Action Plans. Several members of the RWMG, most notably the MBNMS itself, along with other stakeholders in the Greater Monterey County region are working to implement strategies in the MBNMS Action Plans through the IRWM planning process.

N.2 DYNAMICS BETWEEN LOCAL PLANNING AND IRWM PLANNING

N.2.1 How and When Updates are Considered in the IRWM Plan

Most of the planning documents described above are updated on a regular basis, some on an annual basis, others on a decennial basis. All of the data and information contained in this IRWM Plan will be reviewed and updated approximately every five years, depending on available funds, as part of the formal Plan update. Accordingly, the IRWM Plan updates will reflect the latest planning efforts and most recent editions of the local planning documents.

N.2.2 How Regional Planning Efforts Feed Back to Local Planning Efforts

The information exchange between IRWM planning and local water planning is not a one-way exchange.

The IRWM regional planning efforts feed back into local planning efforts in numerous ways. Most RWMG members are themselves local water planners, and the regional planning that occurs through the IRWM process is brought back to these local planning entities. Likewise, the results of the IRWM planning process impacts the decision-making of other water resource planners and stakeholders involved in the Greater Monterey County IRWM planning process. One example is the following:

The City of Salinas's NPDES Phase I Stormwater Permit was renewed in May 2012. Changes in the new order include provisions for the City to pursue IRWM objectives. Specifically:

> 3) Aligning Stormwater Management with Related Planning Goals and Requirements
>
> a) Integrated Regional Water Management –
>
> i) Within 12 months of adoption of this Order, the Permittee shall coordinate with other stakeholders to pursue the Environmental Enhancement Objectives of the May 2006 Integrated Regional Water Management Functionally Equivalent Plan Update, or comparable water supply, water quality, and flood protection and flood management goals and objectives of the Integrated Regional Water Management Plan in use, through the Permittee's stormwater management program.
>
> ii) Within 2 years of adoption of the Order, the Permittee shall identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources consistent with the Integrated Regional Water Management Plan. At a minimum, the Permittee shall examine opportunities for stormwater capture and reuse, and stormwater infiltration for aquifer recharge. (RWQCB 2012d, p. 86)

Ideally the relationship between regional IRWM planning and local water resource management planning will remain dynamic, with the information exchange continuing to occur in both directions.

N.2.3 How Inconsistencies are Resolved

Since the IRWM Plan is essentially built upon local plans and planning efforts, few inconsistencies between the IRWM Plan and local plans exist. If inconsistencies are found they will be resolved through direct communication and coordination with the planning entities where the inconsistencies occur. As noted above, the RWMG intends to conduct an in-depth investigation of potential barriers to IRWM Plan implementation in city and county General Plan policies, ordinances, and other state, regional, and local rules and regulations, for future updates of this IRWM Plan. The RWMG will seek to eliminate any barriers to IRWM Plan implementation by working closely with the regulating agencies to resolve those issues on a case-by-case basis.

N.2.4 Climate Change Adaptation and Mitigation Strategies in Local Plans

Local water planning agencies are only in the beginning stages of adopting climate change adaptation and mitigation strategies in their local plans. As climate change adaptation and mitigation strategies become more developed in local water management planning efforts, those strategies will become incorporated into the Greater Monterey County IRWM Plan with future Plan updates. Please see Section R, Climate Change, for a full discussion of the RWMG's current climate change recommendations and strategies for the Greater Monterey County region.

The RWMG has been in communication with water managers and land use managers in the broader Central Coast region regarding climate change mitigation/GHG reduction efforts along the Central Coast. The Climate Change section for this IRWM Plan was developed with significant contributions from a Climate Task Force, comprised of local scientists, water resource managers, land use managers, and

coastal policy experts before the chapter was submitted for inclusion within this Plan. Participating entities on the Climate Task Force include: Central Coast Wetlands Group at Moss Landing Marine Laboratories, Stanford University Center for Ocean Solutions, Monterey Bay National Marine Sanctuary, Santa Cruz County, Association of Monterey Bay Area Governments, Monterey County Planning, California Water Company, Monterey County Water Resources Agency, Stanford University Natural Capital Project, California Department of Water Resources, Santa Cruz County Resource Conservation District, and The Nature Conservancy.

The RWMG will continue to seek to partner with these entities, as well as with other RWMGs in the Central Coast region, and to participate in other regional climate change efforts in order to collectively and proactively address the issue of climate change on the Central Coast.